Plant Data Sheet

Red alder, *Alnus rubra*	

Range
Pacific Northwest coastal areas into SE Alaska (Silvics of N.A. 1990)

Climate, Elevation
Low winter temperatures and lack of precipitation limit red alder. Locally, elevations below 450 m (Silvics of N.A. 1990)

Local occurrence (where, how common)
Forest understory, disturbed sites, riparian, wetlands

Habitat preferences
Moist soils, sunny sites, disturbances (Silvics of N.A. 1990)

Plant strategy type/successional stage (stress-tolerator, competitor, weedy/colonizer, seral, late successional)
Weedy, colonizer and seral. Nitrogen-fixer

Associated species
Big-leaf maple, Douglas fir, willow, western red cedar, western hemlock, grand fir, black cottonwood (Silvics of N.A. 1990)

May be collected as: (seed, layered, divisions, etc.)
Seed, stump-sprouts, greenwood cuttings, mound layering (Silvics of N.A. 1990)

Collection restrictions or guidelines
Seeds shed in September (Alaska) through December (California) (Silvics of N.A. 1990)

Seed germination (needs dormancy breaking?)
Will germinate in fall or spring on moist mineral soil in full sunlight. No or little dormancy. (Silvics of N.A. 1990)

Seed life (can be stored, short shelf-life, long shelf-life)
Short; very small seeds. Store no more than two seasons.

Recommended seed storage conditions
Store in paper sacks in cool, dry environment

Propagation recommendations (plant seeds, vegetative parts, cuttings, etc.)
Collect cones, separate seeds, plant seeds. Pull-ups also convenient and plentiful. (Rose et al. 1996)

Soil or medium requirements (inoculum necessary?)
Will grow in non-soil medium, but requires inoculum for nitrogen-fixing actinobacteria *Frankia* in nodules.

Installation form (form, potential for successful outcomes, cost)
Seeds, container-plants grown from seeds, green cuttings, bare root (Silvics of N.A. 1990)

Recommended planting density
6' centers (Stevens and Vanbianchi 1994)

Care requirements after installed (water weekly, water once, never water, etc.)
Requires moist soil (Stevens and Vanbianchi 1994)

Normal rate of growth or spread; lifespan
Fast growth: 30' at 5 yrs., 50' at 10 yrs. 80 ft. at 20 yrs. Mature at 60-70 yrs. Maximum age 100 yrs. (Silvics of N.A. 1990)

Sources cited

Burns, R. and B. Honkala 1990. Silvics of North America, Volume 2, Hardwoods. Agricultural Handbook 654. U.S. Department of Agriculture, Forest Service, Washington, D. C. 877 p.

Rose, R., C. Chachulski and D. Haase. 1996. Propagation of Pacific Northwest Native Plants: A Manual, Volume Two, First Edition. Nursery Technology Cooperative, Oregon State University, Corvallis, Oregon, 73 p.

Stevens, M. and R. Vanbianchi. 1993. Restoring Wetlands in Washington: A Guidebook for Wetland Restoration, Planning and Implementation. Washington State Department of Ecology Publication 93-17, 110 p and Appendices.

Data compiled by: Kern Ewing, 14 Mar 2003